

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Jeffrey A. Colborn

Application No.: 10/085,477

Filed: February 26, 2002

For: **METHOD OF AND SYSTEM FOR
COOLING A BACKUP POWER
SYSTEM**

Group Art Unit: To be assigned

Examiner: To be assigned

RECEIVED
MAY -2 2002
TECHNOLOGY CENTER 2800

**DECLARATION OF ASSIGNEE IN SUPPORT OF
PETITION TO MAKE SPECIAL UNDER 37 C.F.R. §1.102(c)**

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

1. I, Jeffrey A. Colborn, am Chairman and Chief Executive Officer of Metallic Power, Inc., the assignee of the above-captioned patent application. In my capacity as Chairman/CEO of Metallic Power, I believe that the invention claimed in the above-captioned patent application will (a) materially enhance the quality of the environment of mankind by contributing to the restoration or maintenance of the basic life-sustaining natural elements, namely air, water and soil, and (b) materially contribute to more efficient utilization and conservation of energy resources. The basis for my belief is as follows:

2. The invention relates to a refuelable and/or regenerative fuel cell, which can replace diesel generators as back-up power sources for buildings when used as a back-up power device as described in the invention. Diesel generators generate a substantial amount of air pollution.

to the earth caused by the mining of lead, and contributing to the restoration and maintenance of the soil.

5. The refuelable and/or regenerative fuel cell will also enable solar/wind power to replace power plants as the primary energy source for a substantial number of homes and businesses. The reason is that refuelable and/or regenerative fuel cells allow for the storage of energy in the form of metal fuel and fresh reaction solution or hydrogen, depending on the type of refuelable and/or regenerative fuel cell. These fuels can be reprocessed from spent reaction products whenever the solar or wind power is available. Later, when power is needed for a house or business, this power can be provided by the refuelable and/or regenerative fuel cell replenished by the reprocessed fuel and fresh reaction solution. Once enabled, solar/wind power is expected to replace power plants as the primary energy source for a substantial number of homes and businesses because it does not release pollutants into the air, is more efficient and less costly.

6. Power plants function by converting energy released through the burning of fossil fuels into power. The burning of fossil fuels in turn releases a substantial amount of pollutants into the air. By enabling solar/wind power to replace power plants as the primary energy source for a substantial number of homes and businesses, the refuelable and/or regenerative fuel cell is expected to materially enhance the quality of the environment by contributing to the restoration or maintenance of the air.

7. The invention also relates to a refuelable and/or regenerative fuel cell system in which a refuelable and/or regenerative fuel cell is interfaced to the power grid and to an energy controller in a home or business which controls one or more loads, e.g., elevators, lights, air conditioners, household appliances such as refrigerators, etc. During off-peak hours, when energy from the power grid is cheapest, the system may draw energy from the power grid in order to reprocess spent reaction solution and reaction products into metal fuel and fresh reaction solution. In addition, whenever energy is needed to drive the loads, the energy controller selectively draws energy from the refuelable and/or regenerative fuel cell to drive the one or more

loads in an energy efficient manner. For example, the controller can automatically turn off lights and air conditioners during off-business hours and power them up again during business hours. The ability of the system to store energy in the form of the fuel allows the two processes –the process of reprocessing spent reaction products and the process of driving one or more loads--to be decoupled from one another, i.e., performed substantially independently of one another.

8. The system is expected to increase the efficiency of the power grid in terms of wattage out divided by quantity of fossil fuel burned. The reason is that the system, because of its capability to store energy in the form of electrochemical fuel, and to decouple the processes of reprocessing spent reaction products and driving loads, is expected to result in more frequent use of base load power plants and less frequent use of peaking plants to drive the power grid. Since base load plants are more efficient than peaking plants, e.g., 60 % vs. 35 %, the result is an overall increase in the efficiency of the power grid.

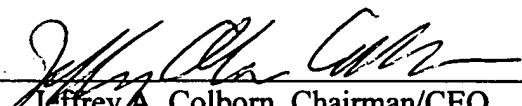
9. To explain why this is so, consider a scenario such as a hot day where the demand exceeds the supply for power from base load power plants. Currently, the response to this scenario will be to power up the less efficient peaking plants to fill the gap between demand and supply. However, with the refuelable and/or regenerative fuel cell system, the response to this scenario is expected to be the use of the refuelable and/or regenerative fuel cell to fill the gap between demand and supply.

10. The increased efficiency of the power grid resulting from use of the system is expected to translate into the introduction of less pollutants into the air since less fossil fuel needs to be burned to provide the same power output. Consequently, the system is expected to materially enhance the quality of the environment by contributing to the restoration and maintenance of the air.

11. The increased efficiency of the power grid also means that the refuelable and/or regenerative fuel cell system is expected to materially contribute to the reduction of energy consumption in combustion systems, industrial equipment, household appliances, etc.

12. All statements made on the basis of personal knowledge are true, and all statements made on the basis of information and belief are believed to be true. Further, these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: March 27, 2002


Jeffrey A. Colborn, Chairman/CEO
Metallic Power, Inc.

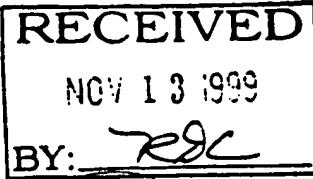


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

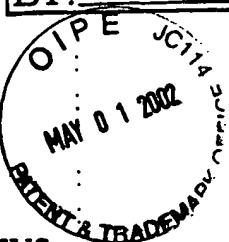
COPY OF PAPERS
ORIGINALLY FILED

04813.0006.00USC

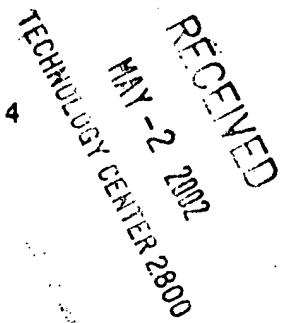
MAILED:



Page No.: 4
dta



DECISION ON PETITION
TO MAKE SPECIAL
UNDER M.P.E.P. 708.02 V



In re application of
Bernardo A. Gutierrez et al

Serial No.: 09/353,422

Filed: July 15, 1999

For: PARTICLE FEEDING APPARATUS
FOR ELECTROCHEMICAL POWER
SOURCE AND METHOD OF MAKING
SAME

This is a decision on the petition filed on July 15, 1999, requesting that the above identified application be granted Special Status under Sections 37 C.F.R. 1.102 and M.P.E.P 708.02 V.

The petition has been considered and found to comply with the requirements set forth under the above noted section.

The petition is GRANTED.

Richard V. Fisher
Director, Technology Center 1700
Chemical and Materials Engineering

Richard D. Clarke
P.O. Box 1666
Spring Valley, CA 91979-1666



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, DC 20231
www.uspto.gov

COPY OF PAPERS
ORIGINALLY FILED

RECEIVED
DOCKET DEPT.
HOWREY SIMON ARNOLD & WHITE

JUL 13 2000

JUL 14 2000

WASHINGTON, D.C.

In re Application of

Jeffrey A. Colborn

Serial Number: 09/449,176

Filed: November 24, 1999

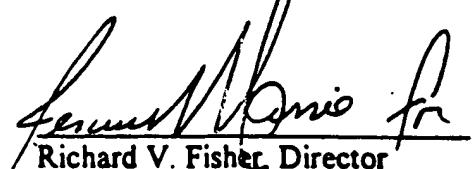
For: SYSTEM AND METHOD FOR PREVENTING
THE FORMATION OF DENDRITES IN A
METAL/AIR FUEL CELL, BATTERY OR METAL
RECOVERY APPARATUS



RECEIVED
TECHNOLOGY CENTER 2800
MAY - 2 2002
DECISION
ON
PETITION

This is in response to the petition filed November 24, 1999, requesting that the above-identified application be granted Special Status under Section 708.02 (V) of the MPEP.

The petition has been considered and found to comply with the requirements set forth under the above-noted section. Accordingly the petition is granted.


Richard V. Fisher, Director
Technology Center 1700
Chemical and Materials Engineering

Robert C. Laurenson
Howrey, Simon, Arnold & White, LLP
Box No. 34
1299 Pennsylvania Avenue, NW
Washington, DC 20004-2402

DOCKETED 9dc 7.14.00



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, DC 20231
www.uspto.gov

RECEIVED

DOCKET DEPT.

HOWREY SIMON ARNOLD & WHITE

JUL 20 2000

JUL 21 2000

COPY OF PAPERS
ORIGINALLY FILED

94813.0005.00

USDC

In re Application of
Martin Pinto et al

WASHINGTON, D.C.

Serial Number: 09/521,392

Filed: March 8, 2000

For: REFUELABLE ELECTROCHEMICAL POWER
SOURCE CAPABLE OF BEING MAINTAINED
IN A SUBSTANTIALLY CONSTANT FULL
CONDITION AND METHOD OF USING THE
SAME

DECISION
ON
PETITION

RECEIVED
MAY -2 2002
TECHNOLOGY CENTER 2800

O I P E
MAY 01 2002
P A T E N T & T R A D E M A R K C E N T E R
U. S. P. T. O.

This is in response to the petition filed March 8, 2000, requesting that the above-identified application be granted Special Status under Section 708.02 (V) of the MPEP.

The petition has been considered and found to comply with the requirements set forth under the above-noted section. Accordingly the petition is granted.

Richard V. Fisher

Richard V. Fisher, Director
Technology Center 1700
Chemical and Materials Engineering

Robert C. Laurenson
Howrey, Simon Arnold & White, LLP
Box No. 34
1299 Pennsylvania Avenue, N.W.
Washington, DC 20004-2402

DOCKETED sdc 7.21.00



04813.0008.00 USDC
UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAILED: OCT - 2

In re application of
Martin Pinto
Stuart Smedley
Jeffrey Colborn
James Evans

Serial No.: 09/573,438
Filed: May 16, 2000
For: ELECTROLYZER AND METHOD
OF USING THE SAME

COPY OF PAPERS
ORIGINALLY FILED

Page No.: 5
APP



DECISION ON PETITION
TO MAKE SPECIAL
UNDER M.P.E.P. 708.02 V

RECEIVED
MAY -2 2002
TECHNOLOGY CENTER 2800

This is a decision on the petition filed on August 14, 2000, requesting that the above identified application be granted Special Status under Sections 37 C.F.R. 1.102 and M.P.E.P 708.02 V.

The petition has been considered and found to comply with the requirements set forth under the above noted section.

The petition is GRANTED.

Richard V. Fisher
Richard V. Fisher
Director, Technology Center 1700
Chemical and Materials Engineering

RECEIVED
DOCKET DEPT.
HOWREY SIMON ARNOLD & WHITE

OCT 5 - 2000

WASHINGTON, D.C.

Howrey Simon Arnold & White LLP
Box 34
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004



UNITED STATES PATENT AND TRADEMARK OFFICE

COPY OF PAPERS
ORIGINALS FILED

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, DC 20231
www.uspto.gov

RECEIVED
DOCKET DEPT.
HOWREY SIMON ARNOLD & WHITE

JUN 14 2001

Paper No. 8

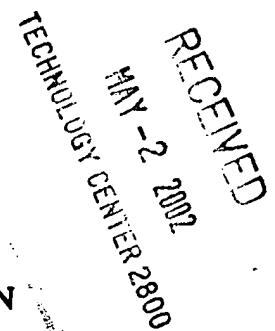
Robert C. Laurenson
Howry Simon Arnold & White, LLP
Box No. 34
1299 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2402

WASHINGTON, D.C.



JUN - 8 2001

DECISION ON PETITION
TO MAKE SPECIAL



In re Application of: Jeffrey A. Colborn
Application No.: 09/627,742
Filed: July 28, 2000
For: SYSTEM AND METHOD FOR
POWER MANAGEMENT

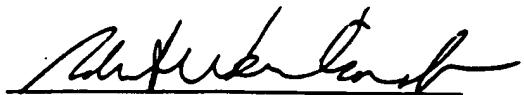
This is a decision on the request for reconsideration, filed May 18, 2001 on the petition filed October 3, 2000 under 37 C.F.R. §102(c) and M.P.E.P. § 708.02(V): Environmental Quality, to make the above-identified application special. The request for reconsideration also includes an assertion that this application meets the criteria to be made special under M.P.E.P. § 708.02(VI): Energy.

A grantable petition under 37 C.F.R. §1.102(c), and M.P.E.P. §708.02, Section (VI), must be accompanied by a showing that the application is for an invention which materially contributes to (A) the discovery or development of energy resources, or (B) the more efficient utilization and conservation of energy resources. Examples of inventions in category (A) would be developments in fossil fuels (natural gas, coal, and petroleum), nuclear energy, solar energy, etc. Category (B) would include inventions relating to the reduction of energy consumption in combustion systems, industrial equipment, household appliances etc. Such petitions should be accompanied by statements under 37 C.F.R. § 1.102 by the applicant, assignee, or an attorney/agent registered to practice before the Office explaining how the invention materially contributes to category (A) or (B) set forth above. No fee for such a petition is required. (See 37 C.F.R. §1.102(c) and M.P.E.P. §708.02(VI).)

Petitioner's submissions meet the criteria set out above with respect to M.P.E.P. §708.02(VI)(B), reduction of energy consumption. Accordingly, the petition is GRANTED.

The application file is being forwarded to the Examiner of Record for expedited examination.

DOCKETED LS
6/14/01



Robert A. Weinhardt
Special Program Examiner
Technology Center 2100
Computer Architecture, Software,
& Electronic Commerce
703-305-9780